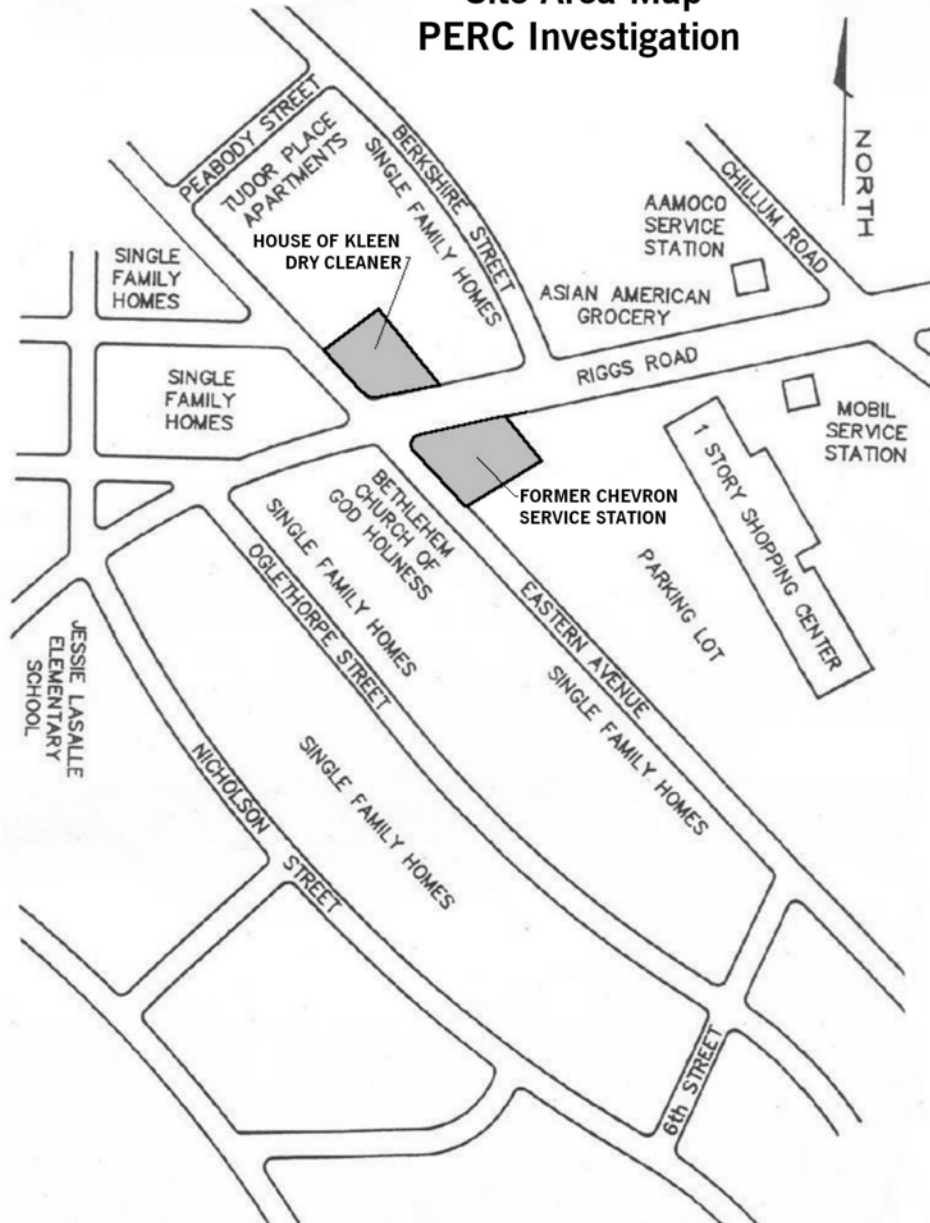


# Chillum PERC Site



National Community Involvement  
Conference  
June 29, 2006

# Site Area Map PERC Investigation







District of Columbia  
/ Maryland Border



Pointer 38°57'42.15" N 76°59'58.39" W

© 2005 TeleAtlas  
Image © 2005 Sanborn

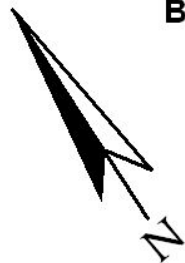
© 2005 Google

Kensington Pl NE Streaming 100%

Eye alt 3250 ft



# BTEX, BENZENE, & TPH-GRO Soil Concentrations



Riggs Road

## Legend

- GP-1 ○ GEOPROBE - MEMBRANE INTERFACE
- PROBE BORING
- SS-1/GW-1 ● GEOPROBE - SOIL SAMPLE AND GROUNDWATER SAMPLE LOCATION
- MW-1 + MONITORING WELL LOCATION
- VP-1 △ VAPOR POINT
- MW-14 □ RECOVERY WELL

Sample ID

BTEX(Benzene)  
in ug/kg

TPH - GRO  
in ug/kg

Maryland  
Washington D.C.

Eastern Avenue

SS-8 (30-31)	SS-7 (30-31)	SS-6 (32-33)	SS-1 (32-33)	SS-2 (33-34)	SS-5 (32-33)	SS-3 (37-38)	SS-4 (33-34)	SS-9 (43-44)	SS-10 (47-48)
1(<1)	2(<1)	2(<1)	ND (<1)	5,680 (515)	9 (2)	875 (220)	20 (<1)	3,042 (256)	4 (<1)
<5,000	<5,000	<5,000	<5,000	93,000	<5,000	<5,000	<5,000	116,000	<5,000

SS-8/GW-8 SS-7/GW-7 SS-6/GW-6 SS-1 GP-1 GP-2 GP-3 GP-4 GP-6 MW-19  
GW-1 MW-18 GW-2 SS-5/GW-5 GP-5 SS-3 GW-6 SS-4/GW-4 SS-9/GW-9 SS-10/GW-10

5894  
5892

5890  
5888

5886  
5884

5882  
5880

5878  
5876  
5874

5872  
5870

5868  
5866

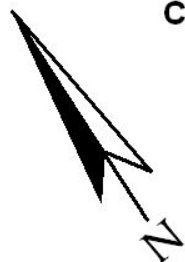
5864  
5862

5860  
5858

5856  
5854

5898

# Chlorinated Hydrocarbon Concentrations In Groundwater



*Riggs Road*

### Legend

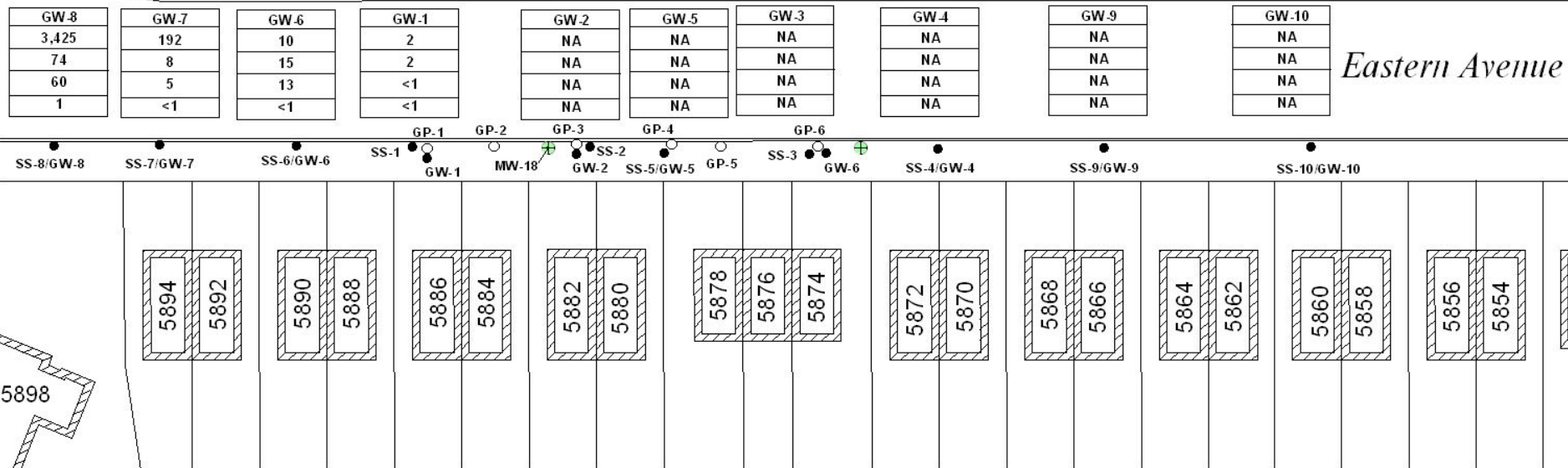
- GP-1 ○ GEOPROBE - MEMBRANE INTERFACE PROBE BORING
- SS-1/GW-1 ● GEOPROBE - SOIL SAMPLE AND GROUNDWATER SAMPLE LOCATION
- MW-1 ⊕ MONITORING WELL LOCATION
- VP-1 △ VAPOR POINT
- MW-14 ⊞ RECOVERY WELL

### Sample ID

PCE
TCE
cis-DCE
trans-DCE

GW-25
NA
NA
NA
NA

GW-12
NA
NA
NA
NA



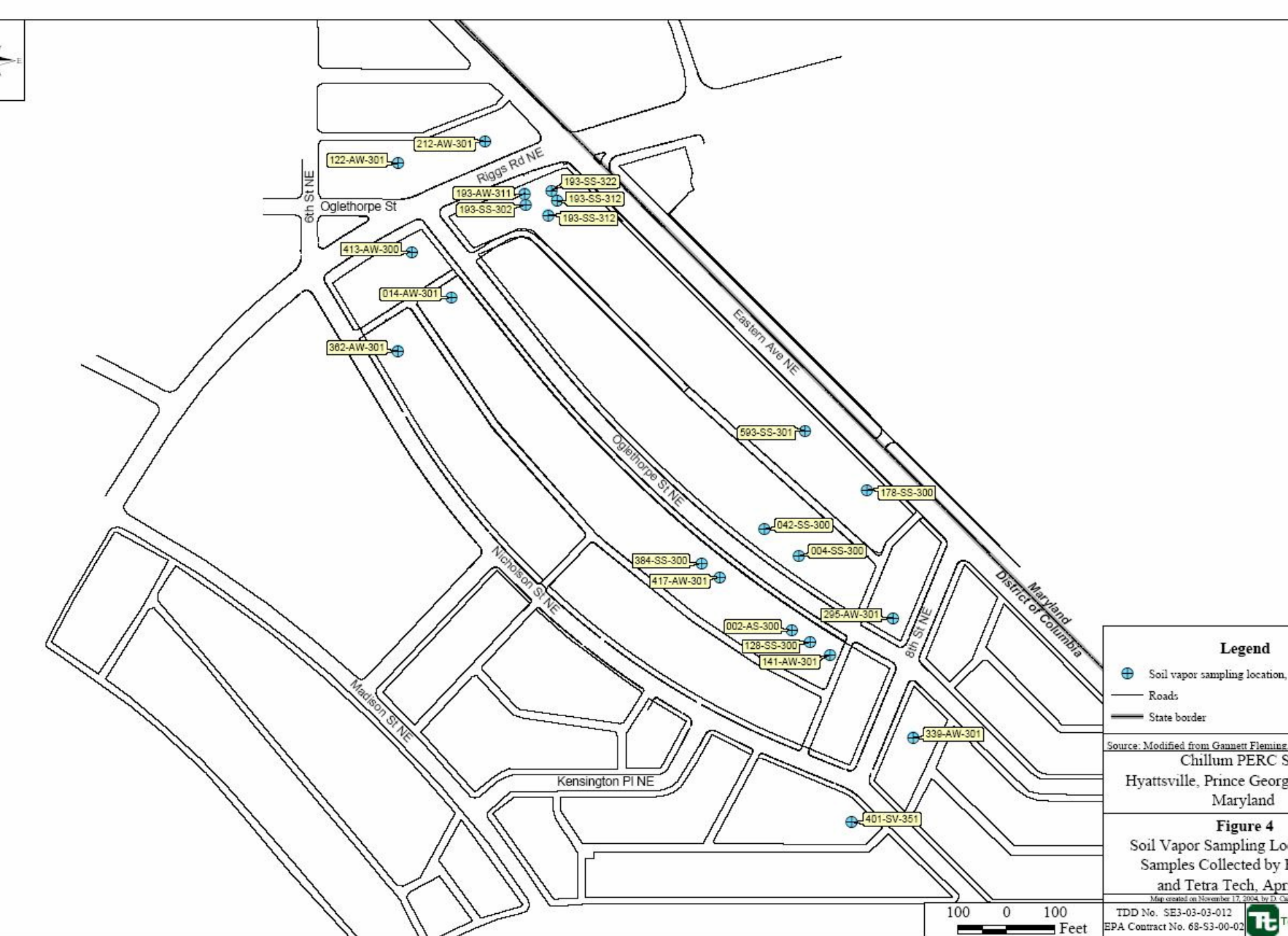
# Passive Soil Gas

December 2002



# Active Soil Gas





# Legend

- Soil vapor sampling location
- Roads
- State border

Source: Modified from Gaumett Fleming  
Chillum PERC S  
Hyattsville, Prince George's  
Maryland

**Figure 4**  
Soil Vapor Sampling Locations  
Samples Collected by I  
and Tetra Tech, Apr

Map created on November 17, 2004, by D. C.

TDD No. SE3-03-03-012  
EPA Contract No. 68-S3-00-02



# Tedlar Bags

































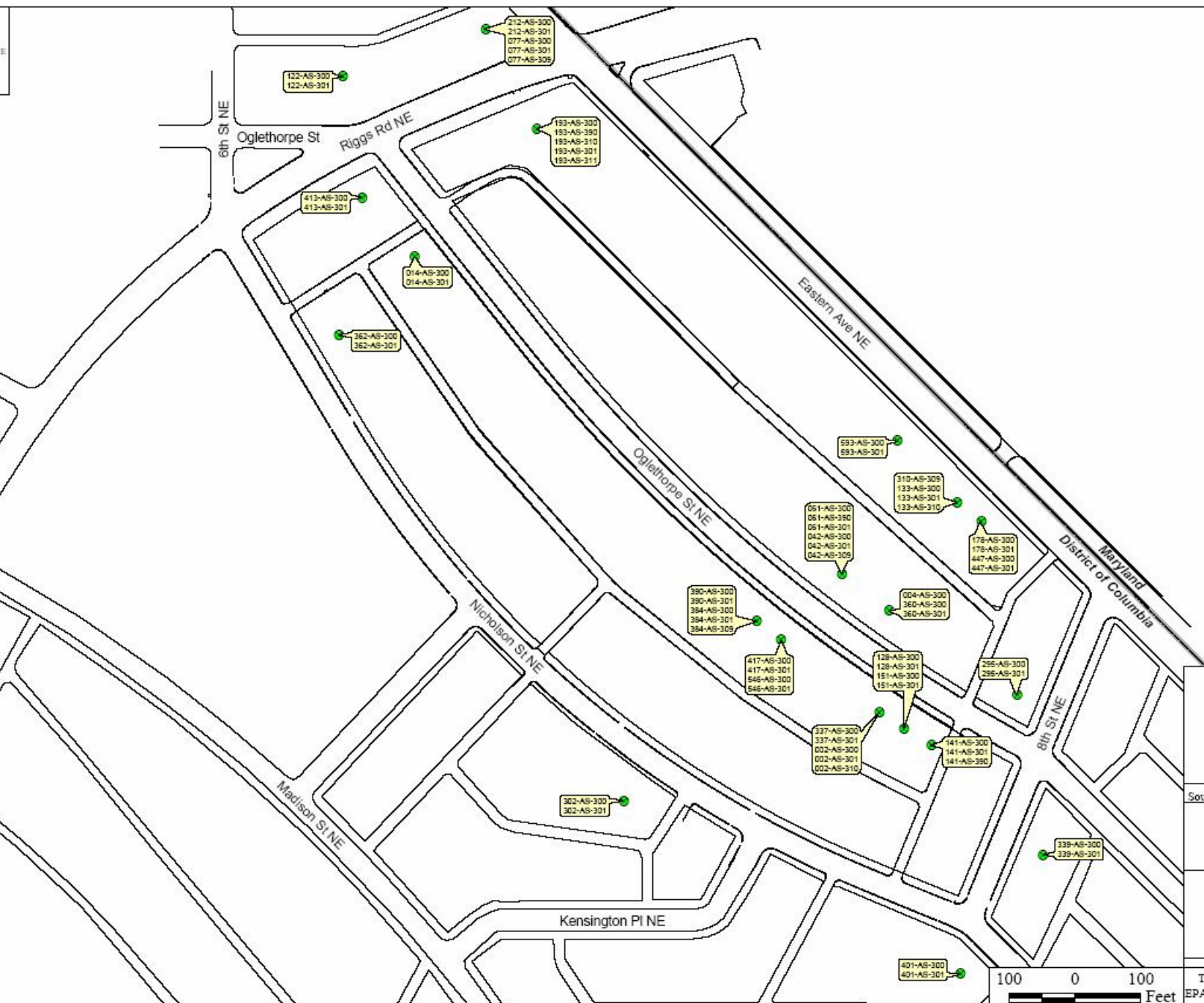
# Indoor Air Sampling

# Indoor Air Sampling

- EPA collected an indoor air sample from one of the two houses whose soil vapor samples exceeded EPA's screening level for short term risk.
- An indoor air sample was also collected from the adjoining residence since both residences were constructed on a shared foundation slab.
- EPA interviewed residents and physically inspected the residences for the presence of household products that could be a source of chemical vapors.

# Summary of Indoor Air Sampling Results

- PERC was not detected above detection limits in any sample (1 part per billion or  $6.8 \text{ ug/m}^3$ )
- Benzene and toluene detected at one location at 1 ppbv ( $3.3$  and  $3.8 \text{ } \mu\text{g/m}^3$ , respectively)
- Benzene and toluene were well below any action level and below a level that is frequently found in the background.



# Legend

- Sampling location
- Roads
- State border

Source: Modified from Gannett Fleming, (2)  
Chillum PERC Site  
Hyattsville, Prince George's  
Maryland

**Figure 5**  
Air Sampling Location  
Summa Canister Samples  
April 13-17, 2004

Map created on November 4, 2004, by D. Call, TTD

TTD No. SE3-03-03-012  
EPA Contract No. 68-S3-00-02

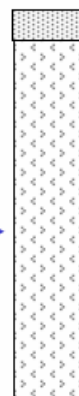


100 0 100  
Feet









**GC/MS**

**Cold Trap**

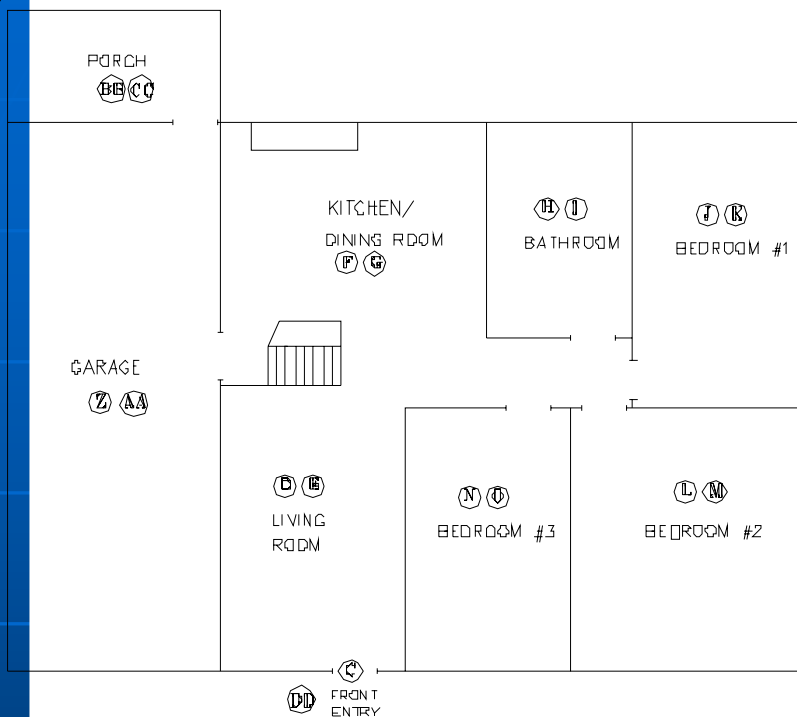
**Sorbent Traps**



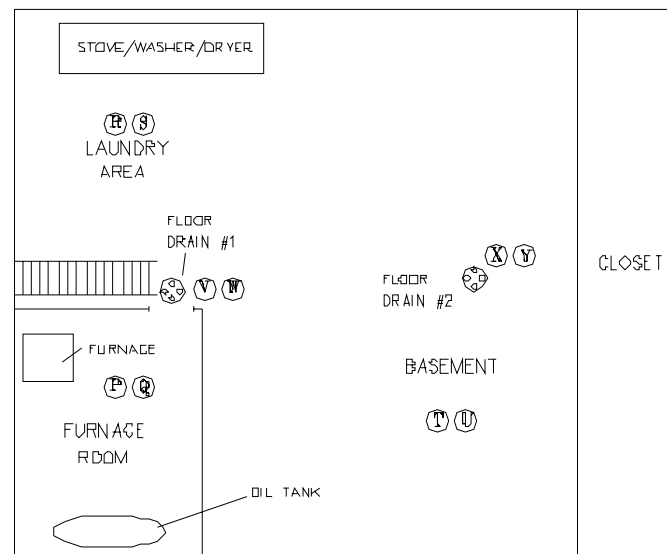
Trace Atmospheric Gas Analyzer Mobile Laboratory



AMBIENT  
LOCATION



1ST FLOOR



BASEMENT

UNIT 022  
HOUSE SURVEY  
1ST FLOOR AND BASEMENT  
HAZ5289  
TRANGUCH SITE  
HAZLETON, PA

U.S. EPA ENVIRONMENTAL RESPONSE TEAM CENTER  
RESPONSE ENGINEERING AND ANALYTICAL CONTRACT  
68-099-223  
W.D.# RJA0094

194/HAZLETON-NF-V1/OTD-022.DWG B/15/01

Figure 36a House Survey in Unit 022, HAZ5289

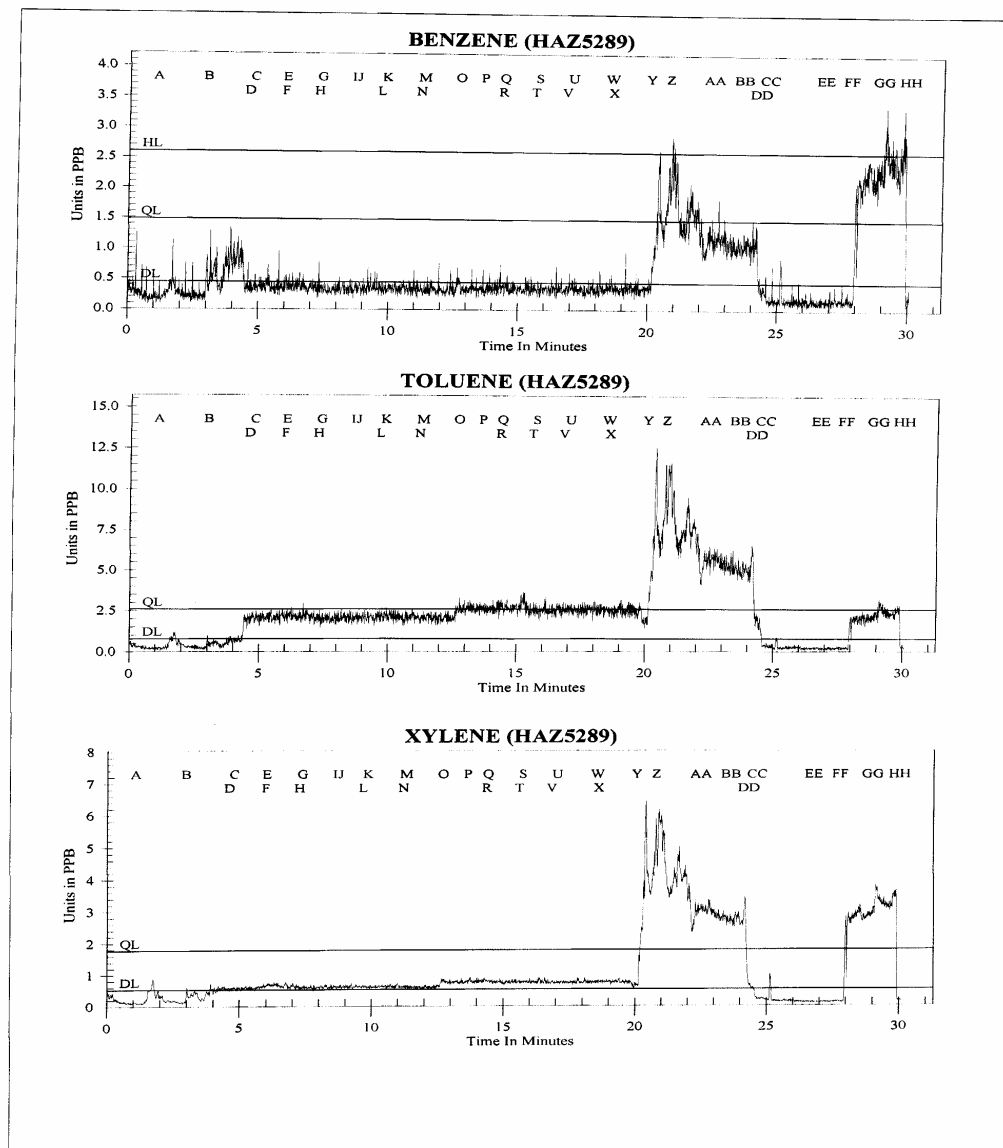


Figure 36c Benzene, Toluene, and Xylene in Unit 022

# TAGA Screening









# Results

- Groundwater Results
- Soil Vapor Results
- Drinking Water Results
- Indoor Air Results
  - TAGA
  - Summa Canister Samples

# Groundwater Results

- Six Samples Collected (Superfund)
  - No PERC detected

# Soil Vapor Results

- 13 Samples Collected
  - Six Samples with PERC detected
    - Four of which found above EPA screening levels (310 ug/m<sup>3</sup>)
    - These levels range from 440 to 2100 ug/m<sup>3</sup>



# Drinking Water Results

- Three Samples Collected
  - No PERC detected
  - Also no Benzene, Toluene, Ethylbenzene, Xylene, or MTB detected

# Indoor Air Results

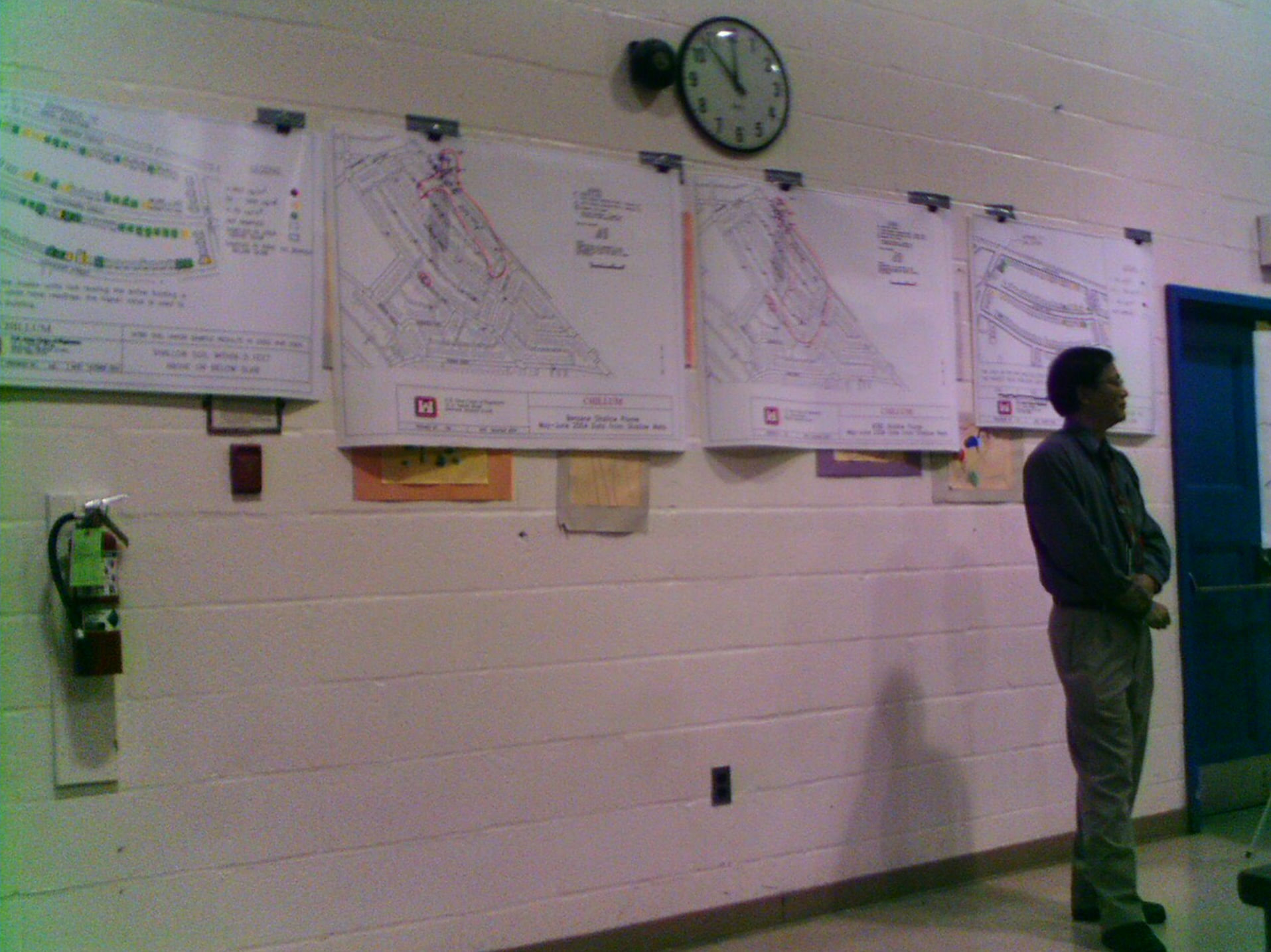
- 46 TAGA Screenings
  - One of which found above EPA action level of 31 ug/m<sup>3</sup>
    - That sample detected at 51 ug/m<sup>3</sup>
    - EPA suspects an indoor air source (dry cleaning).

# Indoor Air Results cont...

- 46 Canister Samples Collected
  - One of which found above EPA action level of 31 ug/m<sup>3</sup>
    - That sample detected at 41 ug/m<sup>3</sup>
    - EPA suspects an indoor air source (dry cleaning).



# Community Involvement







## **PERC INVESTIGATION UPDATE**

EPA has completed two rounds of testing soil vapor and indoor air in the community of Lamond-Riggs. The purpose of the testing was to find out if there are any high levels of dry cleaning fluids or PERC in the soil vapor or air.

The latest round of testing for PERC was taken in April 2004. Previous tests were taken in the summer of 2003. The two rounds of testing will be compared for seasonal variations (cold season versus warm season).

### **Next Steps:**

As soon as the test results are ready, the EPA Project Manager for the PERC investigation will schedule individual appointments with residents to discuss the results of the spring 2004 tests.

To confirm that there are no high levels of PERC in indoor air, EPA will re-test a small number of homes that were tested in April 2004. Re-testing these homes will address sampling issues encountered during the April testing activities. EPA plans to do the re-testing this winter and will contact the homeowners to schedule a convenient time to complete the testing.

## **CHEVRON GASOLINE SPILL INVESTIGATION UPDATE**

The results of Chevron's spring 2004 testing of 22 residential properties and 33 permanent groundwater monitoring wells have been validated. The groundwater monitoring wells have detected levels of MTBE in the shallow groundwater that exceed EPA's action level.

Because of the levels of MTBE in the shallow groundwater, EPA has ordered Chevron to test indoor air at the 22 homes, and at additional homes on Nicholson Street, to make sure that no unsafe levels of vapors are getting into the homes. These homes were selected based on the water table and shallow MTBE plume maps developed by the Army Corps of Engineers (ACOE).

The EPA will not test the indoor air of 68 properties that were tested in 2002 because the results in soil vapor do not exceed EPA's limits for gasoline contaminants.

The spring 2004 tests were taken mostly in houses along Nicholson Street and a small portion of Oglethorpe Street, and on 8<sup>th</sup> Street

*(CONTINUED ON PAGE 3)*



# Contact information:

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U.S. Environmental Protection  
Agency Region III

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